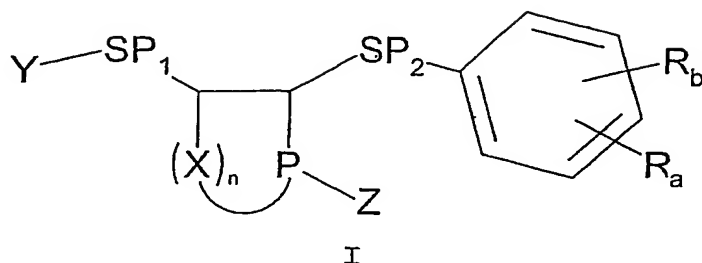


Claims

1. A compound according to formula I



wherein

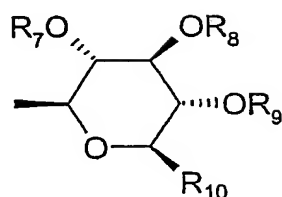
P represents $-N<$ or $-C=$,

X represents independently of each other $-CH_2-$, CR_1 (sp_2 -hybridised), O, $-NH-$, $=N-$, $-CO-$ or $-CS-$, wherein R_1 represents H or NR_2 , wherein R_2 represents H or lower alkyl, which optionally is linked to Z such that a bicyclic structure is formed;

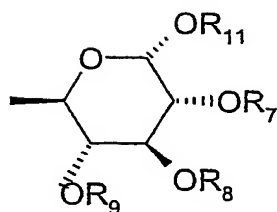
n represents 1 or 2,

R_a represents H, lower alkyl, $-OR_3$, $-O(CO)R_3$, $-O(CO)OR_3$, $-O(CO)NR_3R_4$, $-NR_3R_4$, $-NR_3(CO)R_4$, $-COOR_3$, $-CONR_3R_4$, $-CH=CHCOOR_3$, $-CF_3$, $-CN$, $-NO_2$, SO_3H , PO_3H or halogen, wherein R_3 and R_4 represent H or lower alkyl,

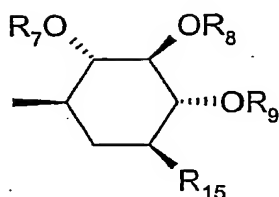
R_b represents H, OH, $-OSO_2Me$, $-OSO_2W$ wherein W represents optionally substituted aryl or heteroaryl, $-OCO(CHOH)_2COOR_5$ wherein R_5 represents H or lower alkyl; or represents the formula $-Sp_3-R_6$, wherein Sp_3 represents a covalent bond, $-O-$, $-OCH_2-$, $-OSO_2CH_2-$, $-OSO_2-$, $-OSO_2-(p)C_6H_4O-$ and R_6 represents one of carbohydrate structures A-D:



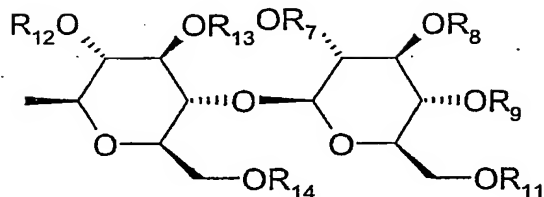
A



B



C



D

wherein

R_7 , R_8 , R_9 , R_{11} , R_{12} , R_{13} and R_{14} represent independently of each other H, lower alkyl, aryl(lower alkyl), -CO-lower alkyl, -CO-aryl, $-SO_3^-$ or $-PO_3^-$,

R_{10} represents $-CH_2OR_{16}$ or $-COOR_{17}$, and

R_{15} represents $-CH_2OR_{16}$, $-COOR_{17}$, $-CH_2NH_2$, $-CH_2OPO_3^-$ or $-CH_2OSO_3^-$, wherein R_{16} and R_{17} independently of each other represent H, lower alkyl, aryl(lower alkyl), -CO-lower alkyl, -CO-aryl, $-SO_3^-$ or $-PO_3^-$,

Z represents optionally substituted aryl or heteroaryl,

Sp_1 represents a spacer unit, such as a straight-chain or branched lower alkyl group $-(CH_2)_p-$, wherein p is from 2-6, which is unsubstituted, mono or poly-substituted by -OH, $-OR_{18}$, halogen or cyano group, wherein one or more $-CH_2-$ groups may independently be replaced by $-O-$, $-CO-$, $-CO-O-$, $-O-CO-$, $-NR_{19}-$, $-NR_{19}-CO-$, $-CO-NR_{19}-$, $-CH=CH-$, $-C\equiv C-$ and wherein R_{18} and R_{19} represent a hydrogen atom or lower alkyl;

Sp_2 represents an optional spacer unit, such as a covalent bond or a straight-chain or branched lower alkyl group -

$(\text{CH}_2)_q-$, wherein q is from 1-6, which is unsubstituted, mono or poly-substituted by $-\text{OH}$, $-\text{OR}_{20}$, halogen or cyano group, wherein one or more $-\text{CH}_2-$ groups may independently be replaced by $-\text{O}-$, $-\text{CO}-$, $-\text{CO}-\text{O}-$, $-\text{O}-\text{CO}-$, $-\text{NR}_{21}-$, $-\text{NR}_{21}-\text{CO}-$, $-\text{CO}-\text{NR}_{21}-$, $-\text{CH}=\text{CH}-$, $-\text{C}\equiv\text{C}-$ and wherein R_{20} and R_{21} represents a hydrogen atom or lower alkyl;

Y represents optionally substituted aryl or heteroaryl,

with the proviso, that if $\text{P} = -\text{N}<$, $n=1$, $\text{X} = -\text{CO}-$ and Sp_2 represents a covalent bond, R_6 may not represent carbohydrate structures A or D for $\text{Sp}_3 = -\text{O}-$ and R_6 may not represent carbohydrate B for $\text{Sp}_3 = -\text{OCH}_2-$.

2. A compound according to claim 1,

with the proviso, that if $\text{P} = -\text{N}<$, $n=1$, $\text{X} = -\text{CO}-$ and Sp_2 represents a covalent bond, R_b may not represent H or OH and Sp_3 may not represent a covalent bond, $-\text{O}-$ or $-\text{OCH}_2-$.

3. A compound according to claims 1 or 2 wherein $\text{P} = -\text{N}<$, $n = 1$ and $\text{X} = -\text{CO}-$, $-\text{CS}-$, $-\text{CH}_2-$ or $-\text{NH}-$.

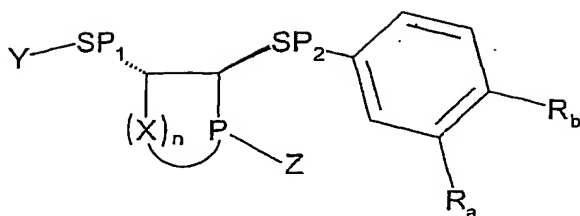
4. A compound according to claims 1 or 2 wherein $\text{P} = -\text{N}<$, $n = 1$ and $\text{X} = -\text{CS}-$, $-\text{CH}_2-$ or $-\text{NH}-$.

5. A compound according to claims 1 or 2 wherein $\text{P} = -\text{N}<$ and $-(\text{X})_n = -\text{OOC}-$, $-\text{COO}-$, $-\text{CONH}-$, $-\text{CH}=\text{N}-$.

6. A compound according to claims 1 or 2 wherein $\text{P} = -\text{C}=$ and $-(\text{X})_n = -\text{NH}-\text{N}=$ or $-\text{O}-\text{N}=$.

7. A compound according to claims 1 or 2 having the formula IVa

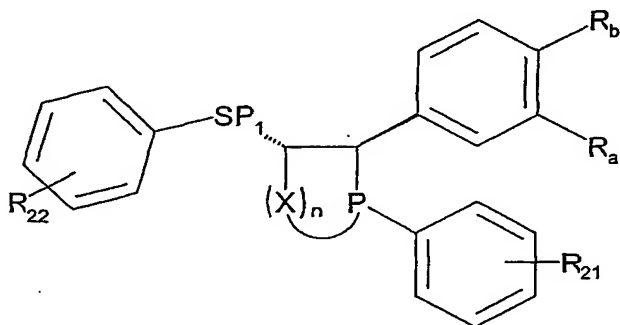
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IVa

wherein R_a , R_b , SP_1 , SP_2 , P , X , Y , Z and n are as defined in claims 1 or 2.

8. A compound according to claims 1 or 2 having the formula IVb,



IVb

wherein R_a , R_b , SP_1 , P , X and n are as defined hereinabove and wherein R_{21} and R_{22} represent H, lower alkyl, lower alkoxy or halogen.

9. A compound according to claims 7 or 8 wherein $P = -N<$, $n = 1$ and $X = -CO-$, $-CS-$, $-CH_2-$ or $-NH-$.
10. A compound according to claims 7 or 8 wherein $P = -N<$, $n = 1$ and $X = -CS-$, $-CH_2-$ or $-NH-$.
11. A compound according to claims 7 or 8 wherein $P = -N<$ and $-(X)_n- = -OOC-$, $-COO-$, $-CONH-$, $-CH=N-$.
12. A compound according to claims 7 or 8 wherein $P = -C=$ and $-(X)_n- = -NH-N=$ or $-O-N=$.
13. A pharmaceutical composition comprising a therapeutically

effective amount of a compound of any preceding claim with a pharmaceutically acceptable carrier.

14. A pharmaceutical composition according to claim 13 for the treatment or prevention of arteriosclerosis or for the reduction of cholesterol levels.
15. A kit comprising a pharmaceutical composition according to claim 13 for use in the treatment or prevention of arteriosclerosis or for the reduction of cholesterol levels.
16. A method for the treatment or prevention of arteriosclerosis or for the reduction of cholesterol levels comprising administering to a subject in need of such treatment an effective amount of a compound according to claims 1 to 12.
17. Use of a compound according to claims 1 to 12 for the manufacture of a medicament for the treatment or prevention of arteriosclerosis or for the reduction of cholesterol levels.